United States
Department of
Agriculture

Forest Service

NA

Date: June 26, 1998

File Code: 3460

Route To:

Subject: Supplemental Black Cherry Health Assessment,

Allegheny National Forest - 1997

To: Forest Supervisor Allegheny NF

On March 18, 1998, we sent you a 3460 memo assessing the health of the black cherry resource in numerous stands on the Allegheny NF which were defoliated by cherry scallop shell moth infestations from 1993 through 1995. This present memo gives supplemental information about the health of black cherry resource on the Allegheny NF associated with specific stands defoliated by this latest cherry scallop shell moth infestation.

Stands with a disturbance history of two and three years of moderate to severe cherry scallop shell moth defoliation were selected to describe how the black cherry health had changed in stands with the most frequent and severest of the disturbances. It was assumed that fewer or less severe disturbances would have much reduced consequences on black cherry health.

Our survey did not show any major decline or mortality of the black cherry resource on the Allegheny NF associated with the cherry scallop shell moth infestation. We previously indicated that most of the black cherry resource (84%) in our survey was healthy or showed only light decline in crown vigor. From 1995 through 1997, there was a gradual improvement (38% to 62%) in healthy black cherry trees. At the same time, the combined moderate and severe crown decline classes slightly decreased to 12%, but dead tree remained static (3%).

While the findings in the previous paragraph apply to an average condition, the black cherry health in specific stands differs to a lesser or greater degree as to the proportion of black cherry trees dead or in the lowest vigor classes. Refer to the attached tabulation for a summary of the black cherry crown vigor class ratings for each of the seven stands surveyed at the end of 1997. For the least healthy stands, Beaver Meadows has 8% of its trees dead, and Vandergriff Corners has nearly a third of trees with low vigor. By contrast for the healthiest stand, Salmon Creek has no dead trees, and only 5% in the lowest vigor classes. The other stands have no more than 4% of their trees dead and no more than 13% of their trees with low vigor.

In summary, most of the black cherry resource on the Allegheny NF we surveyed was healthy or had only light decline in crown vigor. However, there was variation in the health of the black cherry resource. Certain stands had more decline and mortality than others. Compared to the average condition, a few stands had a majority of the dead trees and/or a large proportion of trees in the lowest vigor classes.

Forest stands with concentrations of black cherry trees in the lowest vigor classes may present opportunities for sanitation or pre-salvage harvesting to prevent unacceptable black cherry mortality.

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DANIEL B. TWARDUS Acting Field Representative Forest Health Protection

Attachment

cc: Bradford RD Marienville RD Hazel, AO

PAR/REA/blm

1997 ALLEGHENY NF BLACK CHERRY HEALTH ASSESSMENT

Summary of Black Cherry Vigor Classes for each Stand Surveyed

Salmon Creek	(M01)	Total No. of Trees = 99			
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
1	75	76%	1, 2	94	95%
2	19	19%	3, 4	5	5%
3	4	4%	5	0	<u>0%</u>
4	1	1%			100%
5	0	0%			
		100%			

Slater Run (M02) Total No. of Trees = 146					
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
1	101	69%	1, 2	128	88%
2	27	18%	3, 4	10	7%
3	7	5%	5	8	<u>5%</u>
4	3	2%			100%
5	8	<u>6%</u>			
		100%			,

Beaver Meadov	vs (M03)	Total No. of Tre	ees = 142		
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
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1	87	61%	1, 2	113	80%
2	26	18%	3, 4	17	12%
3	9	6%	5	12	8%
4	8	6%			
5	12	<u>9%</u>			
		100%			

Buzzard Swamp (M04) Total No. Trees = 137					
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
1	95	69%	1, 2	122	89%
2	27	20%	3, 4	10	7%
3	10	7%	5	5	<u>4%</u>
4	0	0%			100%
5	5	4%	· ·		
		100%			

Summary of Black Cherry Vigor Classes for each Stand Surveyed (continued)

Raven Run (M05) Total No. Trees = 83					
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
1	47	56%	1, 2	72	86%
2	25	30%	3, 4	11	13%
3	8	10%	5	1	<u>1%</u>
4	3	3%			100%
5	1	1%			
		100%			

Vandergriff Corners (501) Total No. of Trees = 83						
97 Vigor	*		97 Vigor			
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total	
	•					
1	41	49%	1, 2	59	71%	
2	18	22%	3, 4	24	29%	
3	19	23%	5	0	<u>0%</u>	
4	5	6%			100%	
5	0	0%				
		100%				

Sheriff Run (502) Total No. of Trees = 174					
97 Vigor			97 Vigor		
Class	No. Trees	% of Total	Trees	No. of Trees	% of Total
1	90	52%	1, 2	142	82%
2	52	30%	3, 4	30	17%
3	23	13%	5	2	<u>1%</u>
4	7	4%			100%
5	2	1%			
		100%			